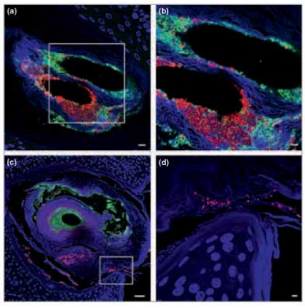
Cutaneous leishmaniasis: treatment options in young children

This report of a Critically Appraised Topic (CAT) states that leishmaniasis is a heterogeneous disease classified according to geographical region and extent of involvement (cutaneous, mucocutaneous, visceral). The authors explain that many treatment options are reported in the published literature for cutaneous leishmaniasis. These range from intravenous infusions to locally destructive therapies; conventional treatment with pentavalent antimonials can be painful

and may be associated with systemic side-effects. This CAT assessed oral miltefosine and topical paromomycin, two outpatient-based treatments, by appraisal of studies supporting their use in the management of children with cutaneous leishmaniasis. The authors concluded that oral miltefosine, a new therapy that they used to treat a child with Leishmania tropica, is an effective treatment. They highlighted that current studies in cutaneous leishmaniasis are difficult to compare due to variation in study design and outcome measure(s); standardization of trials is needed. Br J Dermatol 2015; 172: 861-866

Propionibacterium species and follicular hyperkeratinization

Jahns *et al.* set out to visualize directly the three major propionibacteria in control and acne skin samples. Additionally, they evaluated keratinocyte proliferation. Propionibacteria were visualized by immunol uorescence microscopy; keratinocyte proliferation was assessed by Ki67, keratin 16 (K16) and p63 immunochemistry. They reported that *Propionibacteria acnes* was identified in the majority of samples tested (n = 68, 48%), while *P. granulosum* was identified in only 12 samples (8%); *P. avidum* was not detected at all. Unexpectedly, acne samples did not show higher keratinocyte proliferation than controls, nor was there any association between bacterial colonization and expression of Ki67/K16/p63. The authors concluded that their findings do not support earlier notions of follicular keratinocyte hyperproliferation as a cause of ductal hypercornification in acneic facial skin, and that further studies on the mechanisms underlying hypercornification in acne pathogenesis are now required. Br J Dermatol 2015; 172: 981-987



Myasthenia gravis, autoantibodies and paraneoplastic pemphigus

This study by Wang *et al.* set out to investigate the symptoms, prognosis and profiles of associated autoantibodies in myasthenia gravis (MG), and their correlations in patients with paraneoplastic pemphigus (PNP). They assessed 58 patients with PNP for myasthenic symptoms and laboratory evidence of MG autoantibodies. Overall, 39% of the patients with PNP experienced muscle weakness, and 35% were diagnosed with MG. Moreover, 35% had positive antiacetylcholine receptor (anti-AChR) and 28% had antiacetylcholinesterase (anti-AChE) antibodies, similarly to patients with non-PNP MG (33% and 17%, respectively; $P > 0.05$). However, both were negative in all patients with pemphigus vulgaris, pemphigus foliaceus and connective tissue disorders, and healthy donors ($P < 0.005$). No other antibodies showed significant differences among groups. Anti-AChR and anti-AChE antibody levels were significantly increased in patients with PNP with dyspnoea, while anti-AChR, anti-titin and antiryanodine receptor antibodies were significantly increased in patients with PNP with muscle weakness ($P < 0.05$). The levels and positive rates of these autoantibodies showed no significant differences between PNP with Castleman disease and thymoma. Although anti-AChE levels impacted survival duration ($P = 0.027$, odds ratio 3.14), MG complications did not affect the overall survival percentage in patients with PNP. The authors concluded that MG is a complication of PNP and that anti-AChR and anti-AChE antibodies are prominent in patients with PNP, especially those with dyspnoea. *Br J Dermatol* 2015; 172: 968-975

Innovation in skin grafts for vitiligo

The aim of this study was to compare two methods to create fractional epidermal grafts. The authors explained that current treatments for vitiligo and chronic wounds are often not very effective. They noted that conventional epidermal blister grafting for chronic vitiligo is time consuming, is suitable only for small areas and requires surgical skill. Both of these two novel strategies yielded viable fractional epidermal microblister arrays, carried on a dressing for transfer to graft recipient sites. The microblisters were gradually released on hydration of the dressing adhesive. The authors concluded that one of these two methods, blister array, is practical for fractional epidermal micrografting to treat larger lesions with less donor-site trauma. They summarized the advantages of this method as follows: (i) simple automated harvesting and handling of the epidermal graft, (ii) the ability to treat a larger recipient skin area, (iii) rapid healing due to smaller blisters at the donor-site, and (iv) less donor-site trauma, potentially reducing the incidence of Koebner phenomenon, in which vitiligo is induced in sites of skin trauma. The authors state that prospective clinical trials for this innovative technology are now needed. Br J Dermatol 2015; 172: 1021-1028

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